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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,200	12/05/2000	Jon Schmidt Kindred	899.036US1	7265
21186	7590	07/28/2006	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			GRIER, LAURA A	
			ART UNIT	PAPER NUMBER
			2615	
DATE MAILED: 07/28/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/730,200

Applicant(s)

KINDRED ET AL.

Examiner

Laura A. Grier

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) 2, 7-8, and 18-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of claims 1-2, 6-8, and 16-20 in the reply filed on 5/16/06 is acknowledged.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (herein, AAPA) in view of Brennan et al., U. S. Patent No., 6240192.

Regarding claim 1 and 6, the AAPA discloses automatic gain control including a microphone receiving an input signal, and processing system for detecting the level of the signal, adjusting the gain in respect the envelope, therein. However, the AAPA fails to disclose a digital signal processor with an inhibitor for inhibiting distortions and adjusting, therein.

In a similar field of endeavor, Brennan et al. (herein, Brennan) discloses a input signal from a microphone which is converted via a A/D converter (which indicates modulation and sampling of the audio signal), where the signal is output to a filterbank

and a programmable DSP, where the signals undergo gain adjustments accordingly and less distortions of caused by prior signal processing (col. 3, lines 18-67, col. 4, lines 1-43); wherein it well known in the art that modulation and sampling of audio signal constitutes distortion.

Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA by implementing a digital processor for providing adequate gain control and providing less distortion of the input signal.

Regarding claims 16-17, the AAPA disclose automatic gain control including a microphone receiving an input signal, a preamplifier and processing system for detecting the level of the signal, adjusting the gain in respect the envelope, therein. However, the AAPA fails to disclose an adjuster for inhibiting distortions and adjusting, therein.

In a similar field of endeavor, Brennan et al. (herein, Brennan) discloses a input signal from a microphone, a preamplifier, which is converted via a A/D converter (which indicates modulation and sampling of the audio signal), where the signal is output to a filterbank (claim 17) and a programmable DSP, where the signals undergo gain adjustments accordingly and less distortions of caused by prior signal processing (col. 3, lines 18-67, col. 4, lines 1-43); wherein it well known in the art that modulation and sampling of audio signal constitutes distortion.

Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA by implementing a digital processor for providing adequate gain control and providing less distortion of the input signal.

Claims 2, 7-8 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-2, 6-8, and 16-20 have been considered but are moot in view of the new ground(s) of rejection.

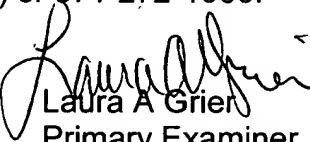
In respect to the applicant comment of a prior restriction election with traverse of Group IV, which was not elected. Group IV differs in respect the characteristic of the smoothing process, which is directed to the smoothing envelope excluding modulation of the signal, wherein the elected Group I, which is now under examination is directed the smoothing inhibiting distortion caused by modulation. In respect the applicant's argument of the art rejection. A new rejection has been provided that provides support of adjusting gain of an input signal in respect to modulation and sampling. It is well known in the art that sampling via an A/D converter and modulation may constitutes to be the same function, in respect the broadest interpretation of the claim language.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (571) 272-7518. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Laura A. Grier  
Primary Examiner  
Art Unit 2615